



Pipeline Safety Regulatory Update



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

To Protect People and the Environment From the Risks of
Hazardous Materials Transportation



PIPES ACT OF 2016

The **Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016**, was passed by Congress and signed into law on June 22, 2016

- It authorizes funding for PHMSA from 2016 to 2019



RULEMAKING ACRONYMS

- ANPRM – Advance Notice of Proposed Rulemaking
 - Used to gather information
- NPRM – Notice of Proposed Rulemaking
 - Defines intent and scope of proposed regulations
- SNPRM – Supplemental Notice of Proposed Rulemaking
 - Additions to, or changes in, intent or scope



RULEMAKING ACRONYMS

- IFR – Interim Final Rule
 - Typically used for an identified safety issue
- FR – Final Rule
 - Implementation date, depending on significance of regulation and time to implement
- DFR – Direct Final Rule
 - Used for non-controversial issues



RULEMAKING PROCESS

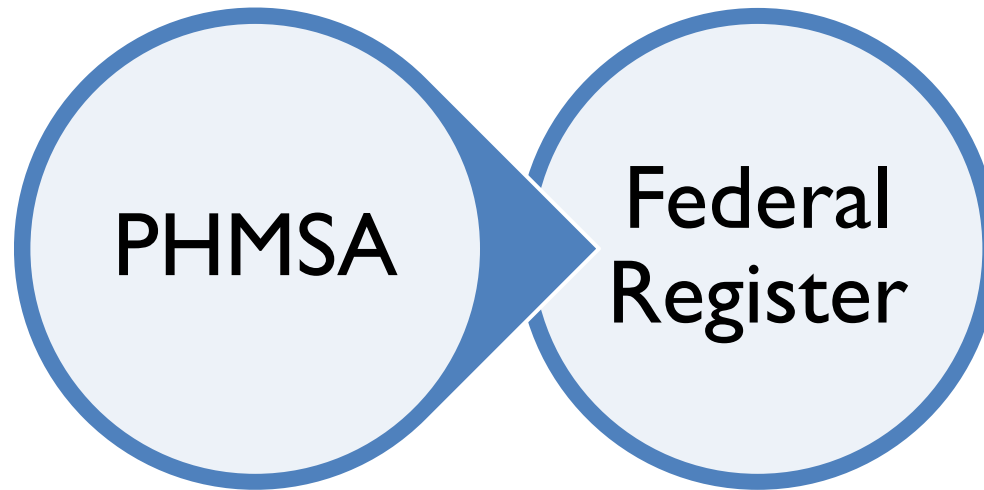
- Where can I find information on the Status of Significant rulemakings?
 - DOT
 - Report on DOT Significant Rulemakings (Monthly reports)
 - <http://www.dot.gov/regulations/report-on-significant-rulemakings>
 - OMB
 - www.reginfo.gov



Significant Rules



Non-significant Rules



OMB Determines what rules are Significant



UPCOMING RULE MAKING

The timeline for all future rulemaking is pending Departmental determinations on implementing and maintaining compliance with the applicable Executive Orders and Memorandums.



REMINDER

- The following PHMSA regulatory updates are simply an overview
- Details can be found in the Federal Register postings



Interim Final Rule Safety of Underground Natural Gas Storage Facilities

(Docket No: PHMSA-2016-0016)



RATIONALE – ALISO CANYON

- One of the largest natural gas releases in U.S. history
- 4-month-long blowout
- 5.4 BCF released (CARB)
 - 8 MMT CO₂ equivalent
 - 20% increase to statewide CH₄ emissions
- Alleged public health impacts



FLIR video of release
Environmental Defense Fund



RATIONALE – PIPES ACT OF 2016

- Statutory Mandate: PL 114-183, Section 13
- The Secretary “shall issue minimum safety standards for underground natural gas storage facilities” within 2 years
- Considerations
 - Consensus standards
 - Economic impacts on gas consumers and end users
 - Findings of the Aliso Canyon task force



KEY DATES

- Publication Date: December 19, 2016
- Effective Date: January 18, 2017



SUMMARY OF INTERIM FINAL RULE

- Reporting requirements
- Incorporates by reference
 - API RP 1170, “Design and Operation of Solution-mined Salt Caverns used for Natural Gas Storage” (July 2015), and
 - API RP 1171, “Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs” (September 2015).



REPORTING REQUIREMENTS

- Four types of reports are required from operators for underground natural gas storage facilities:
 - Annual reports
 - Incident reports
 - Safety-related condition reports
 - National Registry information



API RP 1170 & 1171

- Requires Operators of UNGS Facilities to:
 - Implement construction, maintenance, risk-management, and integrity-management procedures for all UNGS Facilities.



API RP 1170 & 1171

Procedures for newly constructed and existing UNGS facilities that include

- design, construction, material, testing, commissioning, reservoir monitoring, and recordkeeping.
- operations, maintenance, threat identification, monitoring, assessment, site security, emergency response and preparedness, training, and recordkeeping.



49 CFR PART 191

- Underground natural gas storage facility reporting requirements
 - § 191.1 Scope
 - § 191.3 Definitions
 - § 191.15 Incident report
 - § 191.17 Annual report
 - § 191.21 Information Collection
 - § 191.22 National Registry
 - § 191.23 Safety-related conditions



49 CFR PART 192

- Incorporation by reference
- Underground natural gas storage facility safety
 - § 192.3 Definitions
 - § 192.7 Documents incorporated by reference
 - § 192.12 Underground natural gas storage facilities requirements



INTERIM FINAL RULE

Emergency Order Authority

Effective Date: October 14, 2016

- Required by Section 16 of the PIPES Act
 - Establishes temporary emergency order procedures to address unsafe conditions or practices imposing an imminent hazard
 - Augments PHMSA's existing enforcement authority (e.g. Corrective Action Order, Safety Orders)



MAJOR PROVISIONS

- Expands enforcement authority to address imminent safety hazards that exist across a subset or larger group of owners and operators.
- Applies only when PHMSA determines that an unsafe condition or practice is causing an imminent hazard.



MAJOR PROVISIONS

- Provides PHMSA authority to issue an emergency order without advance notice or opportunity for a hearing.
- Applies only to the extent necessary to abate the imminent hazard.



DAMAGE PREVENTION PROGRAMS (EXCAVATION ENFORCEMENT)

- Key Dates
 - Publication Date: July 23, 2015
 - Effective Date: January 1, 2016

Docket No. PHMSA-2009-0192)



FINAL RULE SUMMARY

The final rule creates:

- Part 198, Subpart D – Criteria for adequate state damage prevention enforcement programs and process for assessment
- Administrative procedures for states to contest a notice of inadequacy



FINAL RULE SUMMARY

- New Part 196 – Standards for excavators digging near pipelines
- Adjudication process for excavators cited by PHMSA – Same as for operators cited by PHMSA for violations of pipeline safety regulations



POLICIES – CRITERIA AND ENFORCEMENT

- The preamble outlines two policies:
 - How the state program evaluation criteria will be applied
 - How the excavator enforcement standard will be applied
- The policies are not part of the rule; they are flexible and can evolve as the rule is implemented



FEDERAL STANDARD FOR EXCAVATORS

- Call 811 before excavating
- Wait for pipeline operators to establish and mark the location of underground pipelines before excavating
- Excavate with proper regard for the marks, take all practicable steps to prevent excavation damage
- Make additional use of one-call as necessary



To Protect People and the Environment From the Risks of Hazardous Materials Transportation



FEDERAL STANDARD FOR EXCAVATORS

- Any contact with pipelines must be reported to operator at earliest practical moment
- If there is a release, excavator must call 911

NOTE: There are no exemptions in the rule. PHMSA will be considerate of exemptions in state laws when undertaking Federal enforcement action.



Operator Qualification, Cost Recovery, Accident and Incident Notification, and Other Changes

(Docket: PHMSA-2013-0163)



NOTE:

Many provisions related to OQ were discussed in the NPRM but were not carried through to the final rule. However, the Agency may decide to initiate a rulemaking re-proposing similar provisions at a later date.



KEY DATES

- Publication Date: January 23, 2017
- Effective Date: March 24, 2017



SUMMARY OF FINAL RULE

- Specifies an operator's accident and incident reporting time to within 1 hour.
- Sets up a cost recovery fee structure for design review of new gas and hazardous liquid pipelines.
- Provides a renewal procedure for expiring special permits.



SUMMARY OF FINAL RULE

- Excludes farm taps from the DIMP requirements.
- Requires pipeline operators to report permanent reversal of flow to PHMSA.
- Provides methods for assessment tool selection by incorporating consensus standards by reference in part 195 for stress corrosion cracking direct assessment.



SUMMARY OF FINAL RULE

- Requires electronic reporting of drug and alcohol testing results in part 199, and modifying the criteria used to make decisions about conducting post accident drug and alcohol tests.
- Adds a procedure to request PHMSA keep submitted information confidential.



SUMMARY OF FINAL RULE

- Adds reference to Appendix B of API 1104 related to in-service welding in parts 192 and 195.



SUMMARY OF FINAL RULE

- Develops and clarifies requirements for team training of control center staff involved in pipeline operational decisions.
- Develops requirements for team training of control center staff involved in pipeline operations similar to those used in other transportation modes.



Excess Flow Valves (EFV) for Multi-Residential and Commercial Applications

(Docket No. PHMSA-2011-0009)



KEY DATES

- Publication Date: October 14, 2016
- Effective Date: April 14, 2017



BRIEF HISTORY OF EXCESS FLOW VALVES

- Between 1970 and 2001, NTSB issued more than 10 recommendations that dealt with using/installing excess flow valves (EFV)
- The most recent NTSB Safety Recommendation on EFVs, P-01-2, is addressed in this rulemaking
- In the past, mandatory EFV installation was not supported:



BRIEF HISTORY OF EXCESS FLOW VALVES

- EFVs were perceived as unreliable
- Concerns about unintentional EFV closure, causing pilot burners to go off
- Potential cost to relight all pilots & deal with public complaints



BRIEF HISTORY OF EXCESS FLOW VALVES

- Operators believed EFVs interfered with O&M activities
- Concerns that frozen moisture can block EFV's small opening in winter
- Cost/benefit numbers were too high
- Limited availability of large volume EFVs
- Difficult to size at varying loads
- Do not work below 10 psig



FINAL RULE – EFVS REQUIRED

- § 192.383(b) Operators must install an EFV on new or replaced service lines that:
 - Branch to an Single Family Residence
 - Serve multifamily residences where the known load is $\leq 1,000$ SCFH
 - Serve single, small commercial customers where the known load is $\leq 1,000$ SCFH
 - Exceptions: < 10 psig, contaminants in gas stream, interference with O&M activities, EFV unavailable



FINAL RULE – EFVS REQUIRED

- §192.383(d) Existing customers have a right to request EFV installation
- §192.383(e) Operators must notify customers of their right to request EFVs & this notice must be available for PHMSA inspection

(cont.)



FINAL RULE PROVISIONS

- Except for master-meter and LPG operators w/fewer than 100 customers, each operator must report EFVs in Annual Report



FINAL RULE PROVISIONS

- § 192.385 Each operator must install either a manual shut-off valve or, if possible and based on sound engineering analysis, an EFV, on new or replaced service lines $> 1,000$ SCFH
- § 192.385 Manual shut-off valves must be installed to allow accessibility during emergencies & are subject to maintenance consistent with the valve manufacturer's specification



ALERT NOTICES & ADVISORY BULLETINS

- **Alert Notices** - a notice of a situation of immediate safety concern
- **Advisory Bulletins** - an advisory of a safety concern that an operator should follow as it applies to their facilities and operations
 - matters that have potential to become
 - safety or environmental risks



Advisory Bulletin (ADB)

ADB– 2016-04

Ineffective Protection. Detection, and Mitigation of Corrosion Resulting from Insulated Coatings on Buried Pipelines

- To remind all owners and operators of hazardous liquid, CO₂ and gas pipelines to consider the overall integrity of facilities to ensure the safety of the public and operating personnel and to protect the environment.



Advisory Bulletin (ADB)

ADB– 2016-04

Ineffective Protection. Detection, and Mitigation of Corrosion Resulting from Insulated Coatings on Buried Pipelines ...continued...

- Operators are reminded to review pipeline operations to ensure that pipeline segments both buried and insulated have effective coating and corrosion-control systems to protect against cathodic protection shielding, conduct in-line inspections for all threats, and ensure in-line tool findings are accurate, verified, and conducted for all pipeline threats



Advisory Bulletin (ADB)

ADB–2016-03

Owners and Operators of Petroleum Gas and Natural Gas Facilities in Areas subject to Heavy Snowfall or Abnormally icy Weather

- Advises owners and operators of the need to take appropriate steps to prevent damage to pipeline facilities from accumulated snow or ice. Past events on natural gas distribution system facilities appear to have been related to either stress of snow and ice or the malfunction of pressure control equipment due to ice blockage of pressure control equipment vents. Take precautionary actions



Advisory Bulletin (ADB)

ADB-2016-01

Water Crossings & Areas Prone to Flooding

- PHMSA is issuing this advisory bulletin to remind all owners and operators of gas and hazardous liquid pipelines of the potential for damage to pipeline facilities caused by severe flooding and actions that operators should consider taking to ensure the integrity of pipelines in the event of flooding, river scour, and river channel migration





QUESTIONS???



CONTACT INFORMATION

Gary McDonald

Gary.Mcdonald@dot.gov

405-686-2306 Office

405-229-0807 Cell

